Serial Number: 09/901,323 Filing Date: July 9, 2001

Title: CHANNEL TRACKING USING CHANNEL COVARIANCE ESTIMATION

Assignee: Intel Corporation

## **REMARKS**

In response to the Office Action dated 12 January 2005, the applicant requests reconsideration of the above-identified application in view of the following remarks. Claims 1-24 are pending in the application. Claims 1, 6, 7, 13, 17, and 20-23 are rejected, and claims 2-5, 8-12, 14-16, 18-19, and 24 are objected to. Claims 6, 9, 13, 17, and 20 will be amended, and claims 7, 8, 14, 19, and 24 will be cancelled, upon entry of the present amendment. No new matter has been added.

### Allowable Subject Matter

The Office Action indicated that claims 2-5, 8-12, 14-16, 18-19, and 24 would be allowable if rewritten in independent form.

The applicant reserves the right to rewrite claims 2-5 in independent form, but believes that claims 2-5 are allowable in view of the remarks made herein.

Claim 6 will be amended upon entry of the present amendment to include features recited in original claims 7 and 8. Claims 9-12 are dependent on amended claim 6, and recite further features with respect to amended claim 6.

Claim 13 will be amended upon entry of the present amendment to include features recited in original claim 14. Claims 15-16 are dependent on amended claim 13, and recite further features with respect to amended claim 13.

Claim 17 will be amended upon entry of the present amendment to include features recited in original claim 19. Claim 18 is dependent on amended claim 17, and recites further features with respect to amended claim 17.

Claim 20 will be amended upon entry of the present amendment to include features recited in original claim 24.

#### Rejection of Claims Under §102

Claims 1, 6, 7, 13, 17, 20, 21, and 23 were rejected under 35 USC § 102(b) as being anticipated by Ishizu et al.(U.S. 5,475,710, Ishizu). The applicant respectfully traverses.

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Claim 1 recites a communication apparatus comprising, among other elements, "means for determining a channel taps covariance matrix for said communication channel using said channel taps" and "means for updating said channel taps using said channel taps covariance matrix."

Claim 1 is a means-plus-function claim under 35 U.S.C. § 112, paragraph 6.<sup>1</sup> The Examiner has not provided an explanation or a rationale as to why Ishizu shows an equivalent to the corresponding elements disclosed in the specification.<sup>2</sup>

The applicant respectfully submits that Ishizu does not show an equivalent to the corresponding elements disclosed in the specification under 35 U.S.C. § 112, paragraph 6. Ishizu does not anticipate claim 1, and therefore claim 1 is in condition for allowance.

Claim 6 will be amended upon entry of the present amendment to include features recited in original claims 7 and 8 to obviate the rejection.

Claim 13 will be amended upon entry of the present amendment to include features recited in original claim 14 to obviate the rejection.

Claim 17 will be amended upon entry of the present amendment to include features recited in original claim 19 to obviate the rejection.

Claim 20 will be amended upon entry of the present amendment to include features recited in original claim 24 to obviate the rejection. Claims 21 and 23 are dependent on amended claim 20, and recite further features with respect to amended claim 20.

The applicant respectfully submits that Ishizu does not show all of the features recited in claims 6, 13, 17, 20, 21, and 23 as amended, and that claims 6, 13, 17, 20, 21, and 23 are in condition for allowance.

# Rejection of Claims Under \$103

Claim 22 was rejected under 35 USC § 103(a) as being unpatentable over Ishizu in view of Gu et al. (U.S. 6,421,380, Gu). The applicant respectfully traverses.

Claim 20 will be amended upon entry of the present amendment to include features recited in original claim 24. Claim 22 is dependent on amended claim 20, and recites further

<sup>&</sup>lt;sup>1</sup> MPEP 2181.

<sup>&</sup>lt;sup>2</sup> MPEP 2182, 2183.

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features with respect to amended claim 20. For the reasons stated above, and the features in the claim, the applicant respectfully submits that Ishizu and Gu do not show or suggest all of the features recited in claim 22, and that claim 22 is in condition for allowance.

#### AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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### **CONCLUSION**

The applicant respectfully submits that all of the pending claims are in condition for allowance, and such action is earnestly solicited. The Examiner is invited to telephone the below-signed attorney at 612-373-6973 to discuss any questions which may remain with respect to the present application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

EYAL KRUPKA

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. Attorneys for Intel Corporation P.O. Box 2938

Minneapolis, Minnesota 55402

(612) 373-6973

Date 12 April 2005

Bv

Robert E. Mates Reg. No. 35,271

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 12th day of April, 2005.

Name

Signature

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# **IN THE DRAWINGS**

Formal drawings are supplied herewith.